

AMP

Annual Report
AMP Incorporated

Pamcor, Inc.

1981

AR53



Highlights

	1981	1980 ⁽¹⁾	Gain
Sales	\$1,234,295,000	\$1,155,382,000	7%
Net Income	\$ 134,770,000	\$ 123,663,000	9%
Net Income as % of Sales	10.9%	10.7%	
Earnings Per Share ⁽²⁾	\$3.75	\$3.44	9%
Dividends Per Share ⁽³⁾	\$1.20	\$1.00	20%
Research, Development and Engineering	\$ 111,000,000	\$ 104,000,000	7%
Capital Expenditures	\$ 108,900,000	\$ 113,300,000	-4%
Backlog	\$ 253,000,000	\$ 248,000,000	2%
Employment	19,650	18,650	5%

⁽¹⁾ Restated in accordance with Financial Accounting Standards Board Statement No. 52, "Foreign Currency Translation".

⁽²⁾ Exchange rate changes reduced earnings 19¢ per share in 1981 and 7¢ per share in 1980.

⁽³⁾ In January, 1982, the quarterly dividend increased 17% to 35¢/share for an indicated annual rate of \$1.40/share — the 29th consecutive annual increase.

The Cover shows shielded, filtered, coaxial, and fiber optic connectors—part of our broad response to the growing need to prevent electromagnetic interference and preserve signal integrity in electronic equipment.

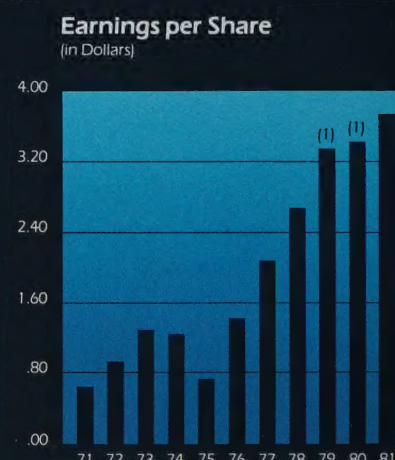
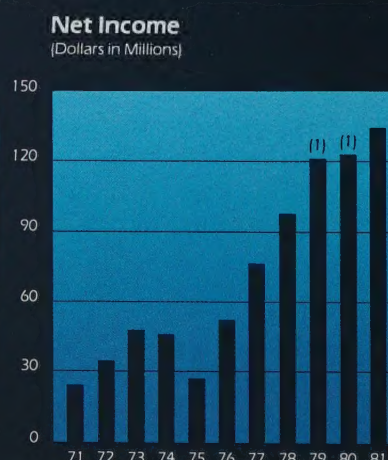
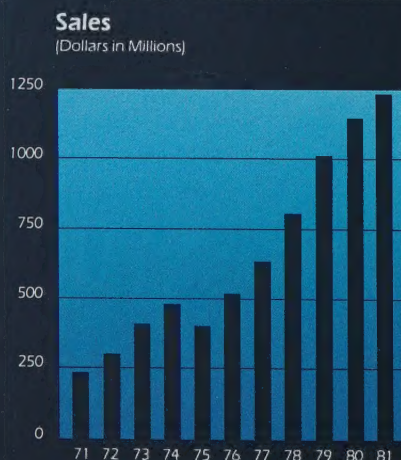
Profile

World's leading producer of electrical/electronic connection devices.
Founded in 1941, AMP is headquartered in Harrisburg, PA. It has a Puerto Rican manufacturing affiliate, Pamcor, Inc. (identical shareholder ownership), and 26 wholly owned subsidiaries and branches: 2 subsidiaries in the

U.S. and 24 international subsidiaries and branches—1 in Canada, 3 in South America, 14 in Europe, and 6 in the Far East.

AMP's steady growth (sales up in all but 3 of 40 years) was achieved through new products and markets without significant acquisitions. Net profit margins averaged 10-12%; Return on Shareholders' Equity averaged 20-25%.

For the past decade, sales, earnings and dividends have grown at an 18-19% compound annual rate.



Annual Stock Price Range	1981	1980	1979	1978	1977	1976	1975	1974	1973	1972	1971
High	62½	56¼	41	40	30⅞	35⅞	40⅞	45¼	52⅞	44	24¾
Low	43½	33	29½	24	24¼	26	23⅞	20⅞	35¼	22⅞	18

Quarterly High-Low Price Range	1981	1980
1st Quarter	55¼ - 44	40¼ - 34⅞
2nd Quarter	62½ - 52¾	41 - 33
3rd Quarter	53⅞ - 43½	51½ - 37⅞
4th Quarter	53⅞ - 45⅞	56¼ - 44⅞

Prices are adjusted retroactively for the 3-for-1 stock split in 1973.

Listed: New York Stock Exchange

Traded: NY, Boston, Midwest,
Pacific, Philadelphia

Symbol: AMP

No. Shareholders: 7,317

Nearly three-fourths of AMP stock is held by more than 300 financial institutions, and the Company is followed by the major brokerage firms. For further information, call or write Investor Relations Dept., AMP Incorporated, Harrisburg, PA 17105; (717) 564-0100.

Principal Transfer Agent and Registrar: Manufacturers Hanover Trust Company, 4 New York Plaza, New York, NY 10015

Co-Transfer Agent: The Continental Stock Transfer and Trust Co., 30 Montgomery Street, Jersey City, NJ 07302

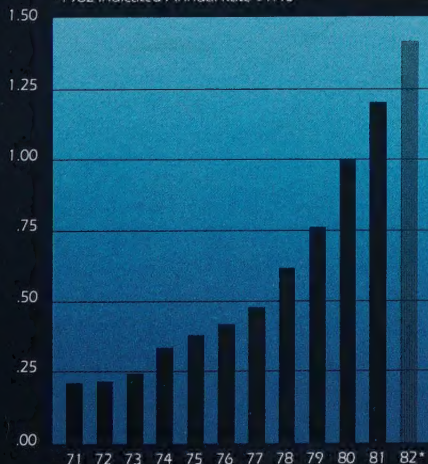
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Dividends per Share

(in Dollars)
*1982 Indicated Annual Rate \$1.40



Sales are becoming increasingly well diversified and more oriented to the fastest growing sectors of the economy.



J. D. Brenner
Chairman of the
Board and Chief
Executive Officer

W. F. Raab
Vice Chairman of
the Board and Chief
Financial Officer

H. A. McInnes
President

Sales and earnings reached new highs in 1981. Sales were up 7% to a record \$1,234,295,000 and net income was up 9% to a record \$134,770,000 or \$3.75 per share. 1981 was a relatively good year considering the recessionary conditions in the U.S. and Europe and negative effects of exchange rate changes. With domestic operations leading with a strong 20% growth, worldwide sales would have been up 13% in 1981 if there had been no change in exchange rates between 1980 and 1981. In local currency terms, our international sales were up 5% in 1981. However, due to the substantial weakening of European currencies against the U.S. dollar, they were down 7% in U.S. dollars. This resulted in a worldwide sales gain, as reported in U.S. dollars, of only 7%.

Earnings were up 9% in 1981 to \$3.75 per share (after a 19¢ reduction from exchange rate change effects) from a restated \$3.44 per share in

1980 (after a 7¢ reduction from exchange rate change effects). Operating income rose consistent with sales growth as overall operating margins held fairly steady—with improvement in domestic and Far Eastern margins largely offsetting the decline in European margins.

We elected early adoption of the new Financial Accounting Standards Board Statement No. 52, under which the effects of exchange rate changes are included in income only when they impact cash flows and are excluded when they do not. Under this statement, the reduction to 1981 net income from exchange rate change effects was 19¢ per share. In contrast, under the previous statement, FASB Statement No. 8, these reductions would have totaled 59¢ per share.

Several organizational changes occurred in the past year. Effective December 31, 1981, R. M. Brumfield, having reached the prescribed retirement age for directors, resigned from the Board. His invaluable contribu-

tions as an 18-year Board member are deeply appreciated. He will serve as a Director Emeritus.

James E. Marley was elected a Corporate Vice President and continues as Vice President, Manufacturing. With AMP 19 years, Mr. Marley had been a divisional vice president for over 10 years.

Benjamin Savidge was elected a Corporate Vice President and continues as Controller. Mr. Savidge joined AMP in 1959 and was Assistant Controller from 1971 to 1979 when he became Controller.

W. Bennett Conner, with AMP in various marketing capacities for over 28 years, was elected a Corporate Vice President. January 1, 1982, Mr. Conner became Director of Marketing, after serving as Vice President of the Industrial Sales Division. He succeeded Herman C. Haas as AMP's senior marketing officer. Mr. Haas retired after over 32 years of excellent service with AMP. He will continue in a consulting capacity.

Oscar B. Rudolph, formerly divisional Vice President, AMP Special Industries, was reassigned as divisional Vice President, AMP Products Corporation, with the added responsibility of the Telecom Sales Division. Robert J. Steele, formerly divisional Vice President, Telecom Sales Division, was reassigned as divisional Vice President, Industrial Sales Division.

James T. Gavin was appointed divisional Vice President—Administration and Controls. With AMP since 1965, he directed the Internal Audit Department for 10 years. He succeeded Clyde Rayburn, who retired in 1981. During his 25 years with AMP, Mr. Rayburn made many significant contributions as Controller and most recently as Vice President—Administrative Services and Controls.

Three long-time employees were appointed divisional vice presidents: August P. Kastel, Packaging and Components Group; H. Chester Timmins, Automatic Machine Group; and Charles T. Wyrick, AMP Keyboard Technologies, Inc. With AMP for 17 or more years, all three served in their present or comparable

positions for several years. Donald W. Shoemaker was reassigned as Vice President—Communications and Assemblies Group.

Several years ago, we began developing membrane switches and keyboards. Then in May 1981, we acquired the membrane switch and keyboard business of Chomerics, Inc., which was the industry leader with 1980 sales of \$11,000,000 in this rapidly growing product area. We formed a subsidiary, AMP Keyboard Technologies, Inc., and installed a management, marketing and technical team. With a rising backlog and good prospects for much higher sales volume in 1982, we are off to a good start on our first acquisition. However, this does not signal a change in our basic approach. We will still rely primarily on internal growth.

September 1981 marked the 40th anniversary of AMP's founding by the late Mr. U. A. Whitaker. AMP has become the recognized leader in its industry, and a premier growth company. Sales, earnings, and dividends have grown at well over a 15% compound annual rate for 30 years. During the past decade, sales grew at an 18% compound annual rate and are becoming increasingly well diversified by products, markets and geography—and oriented to the fastest growing sectors of the economy. Through our concentration on electrical/electronic connection and switching devices, we have an excellent vehicle for fully participating in the future growth of electronics.

As we begin the fifth decade of our history, we are confident we have laid an excellent foundation for continued progress, and are very optimistic about AMP's future. Our technical, manufacturing, marketing, and financial capabilities are the strongest in our history. Our relatively good performance in recent years is due to many factors—deeper involvement with the leaders in the markets we serve; effective responses to advancing technological requirements; constant addition of new products and marketing channels; thorough coverage of emerging growth companies; and a broadening

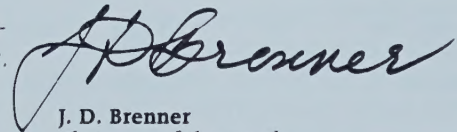
array of application tools and machines that meet the worldwide drive of customers for higher productivity. These same factors will be equally important throughout the 1980's.

The near-term outlook is becoming more favorable. The domestic order pace has improved since the end of the year. Thus, we could show a modest overall sales gain in the first quarter—and also in the second quarter if this order improvement continues and is not offset by adverse exchange rate changes. A higher rate of growth is likely in the second half when economic recovery should be underway. This should permit some improvement in profit margins—particularly in Europe.

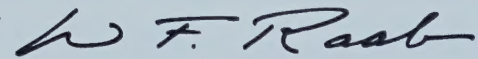
The 17% increase in the dividend in January, 1982, to an indicated annual rate of \$1.40 per share is the 29th consecutive annual increase.

We are deeply appreciative of the excellent contributions of our employees and the fine support of our customers and suppliers.

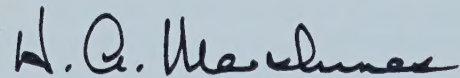
Sincerely,



J. D. Brenner
Chairman of the Board
and Chief Executive Officer



W. F. Raab
Vice Chairman of the Board
and Chief Financial Officer



H. A. McInnes
President

Historical Data ⁽¹⁾

For the Year (dollars in millions)	1981	1980 ⁽²⁾	1979 ⁽²⁾	1978	1977	1976	1975	1974	1973	1972	1971
Net Sales	\$1,234.3	\$1,155.4	\$1,013.2	\$801.1	\$633.0	\$522.0	\$409.6	\$482.1	\$418.0	\$302.1	\$239.6
Gross Income	476.5	454.5	429.3	345.8	274.4	212.2	150.3	194.3	179.7	133.2	100.8
Income From Operations	239.8	230.5	231.8	183.7	146.1	102.5	59.9	98.6	93.6	66.8	46.3
Interest Expense	(13.0)	(14.2)	(10.0)	(9.2)	(8.4)	(7.7)	(9.6)	(12.0)	(3.2)	(2.0)	(2.5)
Other Income, Net	14.2	6.8	5.8	5.5	3.6	2.7	1.8	3.3	2.2	.9	1.5
Income Before Income Taxes	241.0	223.1	227.6	180.0	141.3	97.5	52.1	89.9	92.6	65.7	45.3
Income Taxes	106.2	99.4	106.7	82.3	65.4	45.5	25.1	44.4	45.4	31.7	21.1
Net Income	\$ 134.8	\$ 123.7	\$ 120.9	\$ 97.7	\$ 75.9	\$ 52.0	\$ 27.0	\$ 45.5	\$ 47.2	\$ 34.0	\$ 24.2
Net Income Per Share ⁽³⁾	\$3.75	\$3.44	\$3.35	\$2.67	\$2.06	\$1.40	73¢	\$1.23	\$1.28	92¢	66¢
Foreign Currency Effects included in Net Income Per Share ⁽⁴⁾	(19¢)	(7¢)	(9¢)	18¢	(1¢)	(9¢)	(2¢)	—	10¢	4¢	1¢
Cash Dividends	\$ 43.2	\$ 36.0	\$ 27.4	\$ 22.0	\$ 17.7	\$ 15.2	\$ 13.7	\$ 12.2	\$ 9.1	\$ 8.2	\$ 7.9
Cash Dividends Per Share ^{(3) (5)}	\$1.20	\$1.00	76¢	60¢	48¢	41¢	37¢	33¢	24¾¢	22¢	21½¢
Capital Expenditures	\$ 108.9	\$ 113.3	\$ 96.0	\$ 58.8	\$ 44.6	\$ 20.2	\$ 23.1	\$ 59.2	\$ 53.3	\$ 23.5	\$ 15.0
Depreciation	50.5	43.7	35.8	29.9	25.5	24.0	21.7	16.8	13.1	11.7	11.5
Research, Development and Engineering	\$ 111.0	\$ 104.0	\$ 90.0	\$ 74.0	\$ 58.0	\$ 47.0	\$ 39.0	\$ 46.0	\$ 42.0	\$ 30.0	\$ 24.0
At December 31 (dollars in millions)											
Working Capital	\$ 410.7	\$ 363.0	\$ 326.9	\$285.3	\$246.2	\$197.2	\$151.2	\$105.1	\$104.6	\$102.5	\$ 85.6
Property, Plant and Equipment, Net	362.9	323.4	263.2	192.9	167.0	149.4	157.8	158.2	117.6	78.8	68.4
Total Assets	1,025.4	928.7	837.5	661.5	560.2	475.0	415.7	425.0	345.2	243.9	205.0
Long-Term Debt	56.1	50.1	48.5	44.9	46.8	40.1	42.5	16.5	12.6	12.2	12.6
Total Debt	94.1	102.3	102.3	79.6	77.0	61.4	70.6	95.0	56.8	21.4	22.2
Shareholders' Equity	660.5	577.7	494.4	394.2	334.8	284.3	250.9	236.6	202.4	163.3	137.4
Backlog	\$ 253.0	\$ 248.0	\$ 230.0	\$163.0	\$115.0	\$ 98.0	\$ 73.0	\$ 87.0	\$ 99.0	\$ 58.0	\$ 42.9
Number of Employees	19,650	18,650	18,625	16,925	15,075	13,940	12,847	13,537	14,830	11,585	10,306
Shares of Stock Outstanding ⁽³⁾ (Millions)	35.9	36.0	36.0	36.2	36.7	37.0	37.1	37.0	37.0	36.9	36.9

(1) For further information see Notes to Combined Financial Statements.

(2) Restated in accordance with FASB Statement No. 52.

(3) Per share data based on weighted average shares outstanding. Shares outstanding are adjusted to retroactively give effect to the 3-for-1 stock split in 1973.

(4) The effect of exchange rate changes included in net income per share. See Note 4 to Combined Financial Statements for additional information on years 1981, 1980, and 1979.

(5) In January, 1982 the dividend was increased 17% to an indicated annual rate of \$1.40 per share.

Annual Shareholders' Meetings

The Annual Shareholders' Meetings of AMP Incorporated and Pamcor, Inc. are held the fourth Thursday of April. Formal notices, proxy statements and forms of proxy will be mailed on or about March 19, 1982 to shareholders of record on March 5, 1982 as to the April 22, 1982 meetings at 2:00 P.M. at 15 Exchange Place, Jersey City, New Jersey.

Sales, earnings and dividends have grown at over a 15% compound annual rate for the past 30 years, with sales rising in every year except the recession years of 1958 and 1975. Pre-tax profit margins have averaged 20% and after-tax margins have averaged 10-12%. Return on shareholders' equity has averaged 20-25%.

The company's growth is linked to the production, installation and maintenance of electrical and electronic equipment. Concentration on electrical and electronic connection, switching and programming devices provides a broad-based participation in these end-equipment markets throughout the world.

AMP is considered a high-technology, engineering-oriented company whose business is not labor, materials, or capital intensive. Profit margins are somewhat volume sensitive—dropping below normal when sales are less than expected and rising above normal when sales growth is rapid. Labor and materials cost increases have generally been offset through higher productivity, economies of scale, and modest price increases averaging 4-5% per year.

The 1974-1975 recession, the worst since the 1930's, caused 1975 to show the only significant drop in sales (15%) and net income (41%) since 1958. From 1976 through the spring of 1980, sales growth was rapid (25% compound annual rate) in response to economic recovery and rebuilding of depleted customer inventories. Profit margins returned to normal levels in 1976 and to above-normal levels in 1977-1979 (22-23% pre-tax; 12% after-tax).

Worldwide sales rose 13%, in local currency terms, in 1981, despite recessions in the U.S. and Europe. Exchange rate change effects reduced

the 1981 gain to 7% in U.S. dollars—after a 14% gain in 1980. Under the newly adopted FASB Statement No. 52, earnings rose to \$3.75 per share in 1981 from \$3.44 per share (restated) in 1980 and \$3.35 (restated) per share in 1979. Reductions to earnings from currency rate change effects were 19¢ per share in 1981, 7¢ in 1980, and 9¢ in 1979. In 1981, domestic sales were 56% and domestic net income was 68% of the worldwide total. Geographic segment data is presented in Note 13 on page 30.

Worldwide quarterly results were fairly steady in 1981. Quarterly sales were \$304,800,000, \$314,000,000, \$308,200,000 and \$307,300,000—earnings were 92¢, 95¢, 95¢, and 93¢. See Note 14, page 31 for details.

Domestic sales in 1981 rose strongly in the first quarter and then plateaued for the remainder of the year—for a 20% sales gain. Domestic net income rose 36%—reflecting higher profit margins and a substantial rise in investment income on marketable securities. In 1980, domestic sales grew 11%, while net income declined 5%. Recessionary conditions caused a general downturn in orders from March through August 1980. Sales peaked at a record level in the second quarter and then held at a slightly lower level in the second half, while orders rose by \$20,000,000 in the fourth quarter. Domestic margins were normal in the first quarter, declined in the second and third quarters, and partially recovered in the fourth quarter of 1980 as extensive cost reduction actions took full effect.

International sales were up 5% in 1981 in local currency terms, but were down 7% in U.S. dollars. International net income was down 24%. The decline in European sales and net income, which account for well over half of the international results, more than offset the 19% sales growth and 13% earnings growth (in U.S. dollars) of the rest of international operations.

European sales were flat in 1981 in local currency terms despite a recession throughout the year. However, with the substantial decline in

the value of European currencies against the U.S. dollar, European sales were down 19% in U.S. dollars. European net income declined 38% in 1981, both because of the effect on operating margins of flat sales in the face of rising labor costs, and the substantial effect of exchange rate changes. Economic recovery should bring a resumption of sales growth and a return of European operating margins to more normal levels.

Far Eastern sales rose 25% in 1981 and produced a 42% gain in net income as profit margins improved. Other International sales were up 9% in U.S. dollars in 1981. Net income declined 19% because of the effects of less-than-expected sales growth, primarily due to the Brazilian economic slowdown, and of significant foreign currency transaction losses.

AMP is a high-technology, engineering-oriented company whose business is not labor, materials, or capital intensive.

In 1980, international sales were up 17% and net income was up 12%—with growth strongest in Europe. Sales set new highs in the second quarter, then leveled off in the second half. International orders declined modestly in the fourth quarter with the onset of the European recession. Profit margins were normal until fourth quarter 1980 when lack of sales growth and continued cost increases began to place European margins under pressure.

Prices of our three major materials showed varied trends in recent years. Despite some decline in market prices for copper in the past two years, producer prices for fabricated copper-based materials showed a modest increase for the 1979-1981 period. Similarly, despite softening in crude oil prices in the past year, prices for industrial plastics materials rose moderately in 1981, after more significant increases in 1980 and 1979. In contrast, gold prices averaged

\$460/oz. in 1981 compared to \$600 in 1980 and \$300 in 1979.

Our labor rates have risen steadily for years closely in line with national and industry averages here and abroad. In the U.S., a general increase of 9% in March 1981, followed increases of 9% in March 1980, and 7% in April 1979.

Our product prices have generally increased about once a year in response to higher materials and labor costs. Domestic prices were increased, on average, 6% February 1, 1982; 7% January 1981; 6% January 1980; and 3% July 1979. From March 1980, to July 1981, a gold price adjuster that fluctuated with gold prices was in effect on gold-content products. The international subsidiaries have also increased prices from time to time, but generally less frequently and at a lower average rate—except for the constant price adjustments needed in hyper-inflationary countries.

The impact of inflation and changing prices on sales and income are discussed in Note 15 on page 31.

Cost of sales rose in line with sales in 1981 and 1979, but rose significantly faster than sales in 1980 primarily due to a surge in materials prices in late 1979 and early 1980.

The provision for depreciation has increased each year during the past decade because of rising capital expenditures. The provision for 1982 could approach \$60,000,000 compared to \$50,500,000 in 1981, \$43,700,000 in 1980, and \$35,800,000 in 1979.

Other Income increased to \$14,200,000 in 1981 from \$6,800,000 in 1980 due principally to an increase in interest income—the result of higher interest rates on a larger amount of marketable securities. In addition to interest income (see Note 7, page 29), Other Income also includes the reductions to international income from currency exchange rate change effects (see Note 4, page 29).

Interest Expense declined slightly to \$13,100,000 in 1981 principally because of the decline in our international bank loans and currency rate change effects. Interest Expense rose to \$14,200,000 in 1980 from \$10,000,000 in 1979 primarily because of higher interest rates in our international operations.

The effective tax rate held steady at 44.1% in 1981 and 44.6% in 1980. The decline from 46.9% in 1979 was the result of many factors such as income mix, tax law changes, and tax credits.

Liquidity

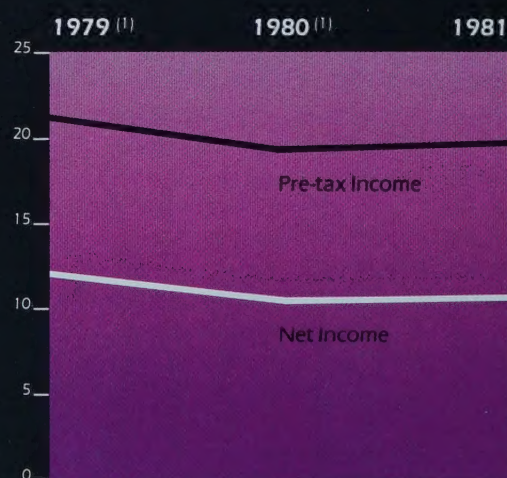
Liquidity improved significantly during 1981. Current assets rose in line with sales growth, while current liabilities rose only slightly—increasing the current ratio at year-end 1981 to 2.6-to-1 compared to 2.5-to-1 at year-end 1980, and 2.3-to-1 at year-end 1979. Working capital rose \$47,700,000 in 1981 to a record \$410,700,000 at year-end 1981.

Financial position is the strongest in our history. The ability to self-finance our expansion is being maintained.

Sales Dollar Use (Percent)	1979 ⁽¹⁾	1980 ⁽¹⁾	1981
Wages, benefits	37.7	37.8	37.2
Materials, services	34.8	37.4	37.6
Depreciation	3.5	3.8	4.1
Interest	1.0	1.2	1.0
Taxes	11.0	9.1	9.2
Dividends	2.7	3.1	3.5
Reinvested	9.3	7.6	7.4
	100	100	100

(1) Restated in accordance with FASB Statement No. 52.

Profitability—Pre-tax Income and Net Income as a percent of sales. (Percent)



Cash and marketable securities (nearly all domestic) rose sharply to \$149,600,000 at year-end 1981 from \$92,000,000 at year-end 1980, and \$95,200,000 at year-end 1979. This was the result of a number of factors—including record earnings, fairly level capital expenditures, and close control of inventories and receivables.

Receivables rose closely in line with sales in 1981; however, for the entire 1979-1981 period, reflecting tight controls and currency rate change effects, they rose at a lower rate than sales.

Inventories were reduced to \$267,600,000 at year-end 1981 from \$284,800,000 at year-end 1980 due primarily to the decline in the cost of gold, and the decline in foreign currencies against the U.S. dollar. Inventories rose in line with sales in 1980, but faster than sales in 1979 primarily because of significant cost increases in copper, gold, and plastics materials.

Total debt was reduced to \$94,100,000 at year-end 1981 from \$102,300,000 at year-ends 1980 and 1979 principally because of a decline in international bank loans and exchange rate changes. With shareholders' equity a record \$660,500,000 at year-end 1981, the percent of total debt to shareholders' equity dropped to 14% from 18% at year-end 1980 and 21% at year-end 1979.

Capital Resources

During the past decade, the Company's growth has been financed almost entirely from internal sources through good profit margins, high returns on assets employed, and a conservative dividend policy. In the past three years, the total internal cash flow of \$553,600,000 came from \$379,400,000 of net income and \$174,200,000 of depreciation and other expenses not requiring current outlays. Total uses of \$547,100,000 were comprised of capital expenditures of \$318,100,000, a working

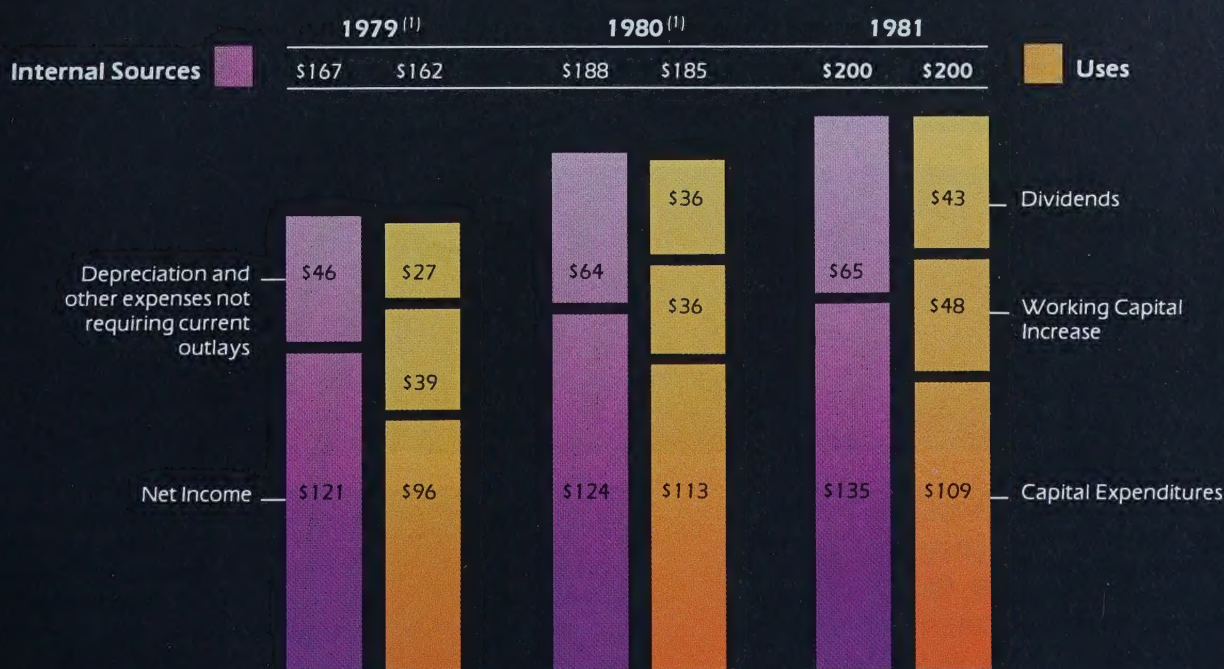
capital increase of \$122,400,000, and cash dividends of \$106,600,000.

To supplement our internal cash flow, particularly during periods of rapid expansion, we can, with AMP's very high credit ratings (AA+) and low debt-to-equity ratio, arrange extensive additional bank credit lines and use other sources such as the commercial paper, note, and bond markets. Therefore, we do not anticipate any need for equity financing.

Our lease commitments are very modest since we own nearly all of our equipment and three-fourths of our buildings. See Note 8, page 29.

Overall, the company considers its performance in recent years to be very good. Worldwide sales and earnings continued to grow despite recessionary conditions and adverse currency exchange rate change effects. Sales and earnings set new highs in 1981 and the financial position is now the strongest in our history.

Cash Flow from Internal sources provides the funds for primary financing requirements. (Dollars in Millions)



(1) Restated in accordance with FASB Statement No. 52.

Despite recessionary conditions, expansion continued at a cautious, but steady, pace in 1981. Capital expenditures of \$108,900,000 were similar to 1980's \$113,300,000. In 1982 this rate of spending should continue at first and then rise when sales growth resumes.

Over half of 1981's total expenditures, as in prior years, was for equipment added within our facilities—production, test, scientific, and office equipment. Another one-fourth was

for land and buildings as we added 700,000 sq. ft. to bring our worldwide floor space to 7,000,000 sq. ft. The balance was for application machines placed with customers. Over two-thirds of the total expenditures were in the domestic operations.

In addition to the new buildings pictured here, facilities were leased, purchased, built or enlarged in the Harrisburg, PA area; East Berlin, PA; Roanoke, VA; several locations in the Greensboro, Raleigh, Winston-Salem, NC area; Sao Paulo, Brazil; Brussels, Belgium; Torrington, England; and Dublin, Ireland.

Our diversified expansion in 1981 continued our basic approach on facilities location. Domestically, we have over 70 facilities in Central/Eastern Pennsylvania; over 20 in the Greensboro, Raleigh, Winston-Salem area of North Carolina; and over 10 in regional complexes started in the

New England area, Virginia, South Carolina, Florida, and Puerto Rico. Whenever feasible, this approach is also followed overseas, where we now have over 30 facilities.

The advantages of this extensive dispersal of facilities are many—access to many excellent labor markets, higher morale, more opportunity for development and advancement of people, closer cost control, greater productivity, better response to customer requirements, and reduced effects from power failures, weather, disasters, or other interruptions.

Employment rose by 1,000 to 19,650 at year-end 1981. All of the increase was in domestic operations, with over one-third due to acquisition of the membrane switch and keyboard business of Chomerics, Inc. and subsequent formation of a new subsidiary—AMP Keyboard Technologies, Inc. In November, we curtailed

New facility in Winston-Salem, NC on Triad Drive for manufacturing flexible flat conductor cable and circuitry.



New manufacturing plant at Waynesboro, PA.



hiring, overtime, and the use of temporary help. Our wage rate increases again closely paralleled national and industry averages here and abroad. Domestically, a general wage increase of 9% was effective in March, 1981.

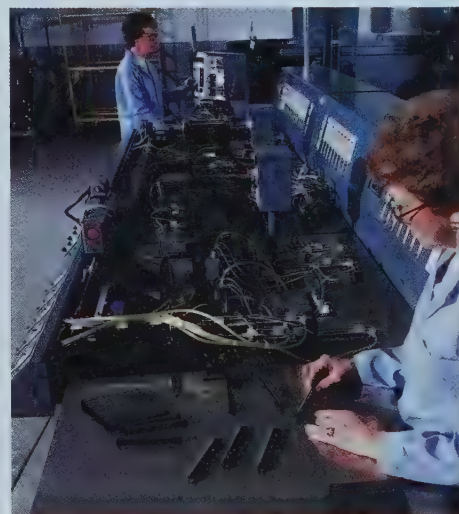
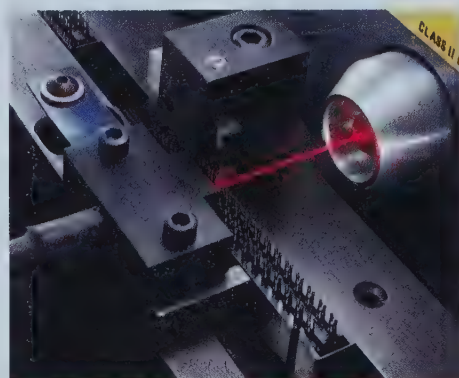
Because of continued expansion and lower than expected growth in 1981, we have ample capacity for higher sales volumes later this year. While we will continue to add capacity throughout 1982, the main thrust of our capital expenditure program, as in 1981, will be toward greater productivity and broader capabilities. Our quest for greater productivity is reaching into every aspect of our activities.

In manufacturing, we are making good progress on more efficient and precise metal stamping and forming, metal plating, plastics molding, and parts assembly. For example, through product redesign and more effective

plating techniques, our corporate gold reduction program decreased the gold content in our products by 25% in 1980 and 15% in 1981—with another 10% projected for 1982. As a world leader in metal plating, we are advancing the state of the art in “selective” gold plating by placing the exact thickness of gold only on the precise small area of the contact where it is actually needed to ensure a reliable connection. Similarly, in materials handling and parts assembly, as our production volumes and labor rates rise, and the complexity of products increases, we are developing far more sophisticated equipment to automate these otherwise labor-intensive operations.

Employee training and development is an increasingly important factor as our business becomes more complex and we add new corporate capabilities. During 1981, for example, approximately one-third of our domestic employees received in-house or external training in several hundred programs and courses in such diverse fields as management and supervision, finance, accounting, engineering, electronics, mathematics, and communications skills. In 1982 nearly 1,000 domestic employees are expected to receive “hands-on” training on the programming and use of computer systems. Starting first in the Harrisburg and York, PA areas, a “regional skills training center” program is underway to help ensure a growing supply of the expert tool-and-die makers and other skilled crafts personnel that are a vital part of our technical and manufacturing operations.

Laser beam technology applied to our manufacturing operations provides greater accuracy and productivity.



Automated connector assembly machine developed by AMP engineers for our Shrewsbury, PA plant.

New administrative and manufacturing facility of AMP Mexico in the Mexico City area.



New headquarters of AMP Keyboard Technologies, Inc. in Burlington, MA.

New marketing headquarters of AMP Germany in Bensheim, West Germany.

The main thrust of our capital expenditure program will be toward greater productivity and broader capabilities.

After extensive use of large computers in data processing for the past quarter century, we began in recent years to apply computer systems in many other parts of our operations. The trend to distribute computer power—to bring computer capabilities to the user—is accelerating. This is providing significant productivity gains and new capabilities.

In the last few years electronic equipment has become far more versatile, cost effective, reliable and "user friendly". In addition, the necessary software has become available. Accompanying this is a growing expertise within AMP on how to tailor these systems to our specific requirements.

We are rapidly installing computer-based systems within AMP for greater productivity and broader capabilities.

Systems are being installed in production plants to control or monitor stamping presses, plastics molding machines, and metal plating processes; to inspect parts; and to generate timely data on production, inventory, and costs. Other computer systems are coming into use in our technical areas to aid in the design of our products, and to speed drafting and the preparation of manufacturing specifications.

New systems are also being designed primarily as "Management Information" or "Decision Support" systems that provide managerial, manufacturing, marketing and tech-

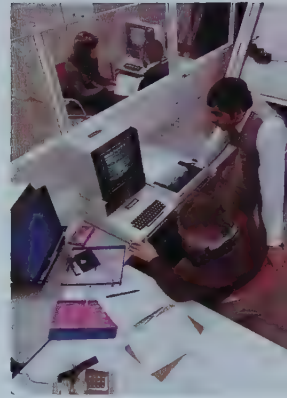
nical personnel with the detailed, timely data needed for better planning and control.

Many of these new systems are "stand-alone" installations such as process control, production monitoring, inspection, and testing equipment—and the personal computers coming into ever wider use within AMP. Others, such as our "Information Center" system, are networks tying remote data terminals to a central computer. Ultimately, we expect most computer systems throughout our worldwide operations will be linked together in broad networks, which, with the constant addition of more intelligence to data terminals, will further increase our computer capabilities.

Our Information Center network has been recognized in the computer trade press as a particularly effective computer system for making a mass of data readily available to many users throughout an organization.

Customers are very impressed with our Computer-Aided Connector Design system. It utilizes a proprietary data bank and program that gives valuable assistance to AMP engineers developing new connectors, and thus minimizes the usual time-consuming, expensive process of building and testing prototypes.

In addition to the computer systems mentioned on these pages, we are making similar rapid progress installing office automation systems—many computer based—such as word processors, data storage, facsimile transmission, and photo-composition equipment. Overall, we are approaching 1,000 installations of computer-based equipment in our worldwide operations. But we are still only in the early stages of adding these valuable new tools. This "electronics boom" is expected to continue at AMP and at tens of thousands of other companies throughout the world for many years to come—a major factor in our optimism about the continuing growth in demand for AMP products. A steadily increasing proportion (now nearly one-third) of our worldwide sales are to manufacturers of computer-based systems.



Apple personal computers, which contain many AMP products, are used extensively in our engineering and marketing areas.

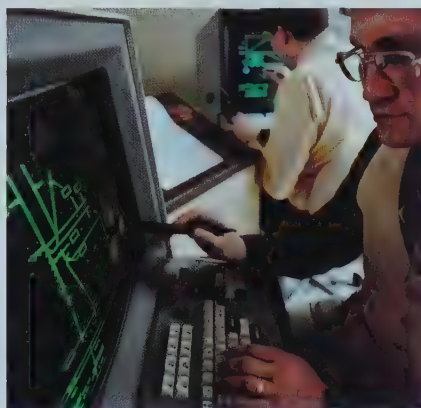




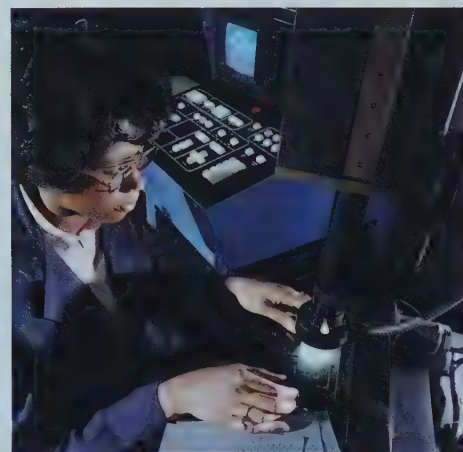
New GenRad control system (Digital Equipment Corp. computer) greatly increases our productivity in vibration testing.



Data terminals in our Business Analysis Dept. are part of our "Information Center" network.



One of a number of Computer-Aided Engineering installations used in the development of new AMP products.



Computer-based system inspects ribbon cable in our cable assembly operations.

The AMP marketing forces are becoming increasingly specialized by markets and products so they can better understand industry trends and anticipate customer requirements. This intense concentration on the markets we serve is critical to our early involvement with customers in their design of next-generation equipment. In 1981, over 3,000 customer personnel visited our facilities to discuss their requirements.

Our early involvement in next-generation customer designs provides them with high quality products at lower installed costs.

Nearly three-fourths of our sales are products applied by the more than 47,000 AMP machines now with customers. Another 20% are products applied with millions of AMP tools. Over 230 field service engineers provide installation and maintenance of application tooling, and training of customer personnel on our products and application tooling. In 1981, over 5,000 customer employees received training at their premises or at AMP training facilities.

The distribution of AMP products is an increasingly important aspect of our marketing. In recent years, for example, we expanded our "Immediate Delivery List" by thousands of items, and added computer-based order systems, marketing subsidiaries, regional warehouses, district offices, sales vans, national retail accounts, and electrical and electronic distributor programs.



Technical personnel from Digital Equipment Corp. visiting AMP headquarters to discuss their next-generation connection requirements.



Left—AMP Special Industries marketing specialist demonstrating our new undercarpet cable system at the leading architectural firm of The Kling Partnership in Philadelphia.



Right—AMP Special Industries representative at Almo Electronics Corp., a new AMP Authorized Industrial Distributor in Philadelphia.



VW "mini-vans" will supplement our fleet of full-size AMPLIVERSAL sales vans for more economical coverage of smaller accounts.



Customers from General Electric and Onan training on an AMPOMATOR wire terminating machine at our Harrisburg, PA facilities.

Our sales are increasingly related to the faster growing sectors of modern society. Nearly three-fourths of our sales are now to electronic-oriented markets; the balance to electrical-oriented markets. The steady, rapid extension of electronics into every aspect of modern life is the underlying foundation of AMP's growth.

Our field of concentration—electrical/electronic connection, switching and programming devices—is now over \$12 billion and growing at a 14-15% compound annual rate. This is a major part (nearly one-half) of the

broad area of "passive components", which is growing at a similar rate. We serve virtually every producer of electrical and electronic equipment in the world. This production is now over \$850 billion. In addition, we serve the huge "after-market"—the industrial maintenance departments, contractors, utilities, airlines, truckers, railroads, mines, shipyards, laboratories, repair shops, and homeowners—who install, maintain and modernize this equipment.

Our sales to these markets are widely diversified in the seven basic categories shown below. Over the past decade, our domestic sales have undergone a significant shift in market orientation. The consumer-oriented portion, usually growing at a slower rate, has declined from 20% to less than 10% of our total. In contrast, the generally faster growing computer and communications markets have risen from 25% to 45% of the total.

In 1981, counter to this longer-term trend, domestic sales growth was highest in Consumer Goods, due in large part to the boom in video games; and lowest in Communications, which reflected temporary cutbacks in the Bell System in the fourth quarter. Internationally, our sales performance, in local currency terms, ranged from a strong gain in Communications to modest declines in Industrial/Commercial Electronics and in Aerospace/Military Electronics.

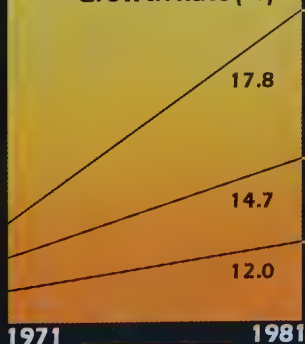
There are several favorable market characteristics of AMP-type products. These include a very long product life and low obsolescence rate; a demand that benefits from the strong growth in semiconductors without their volatility in price and volume; significant product differentiation; and the increasing importance of these devices in the end equipment as they become more precise, complex, of higher value, and critical to the functioning of that equipment.

Approximate Breakdown of AMP's Worldwide Sales by Major Market Categories (Percent)

	1971	1981
Aerospace and Military	10	5
Industrial and Commercial Electronics	15	10
Communications	5	15
Computer and Office	15-20	20-25
Consumer Goods	15-20	10-15
Transportation and Electrical	15-20	15-20
Maintenance, Construction, etc.	15	15

The rapidly growing role of electronics in modern life ensures continued strong demand for AMP products.

Compound Annual Growth Rate (%)



Comparative Growth Rates Worldwide (Dollars in Billions)

	1971	1981
AMP Sales	\$ 2	\$ 1.2
Connection/Switching and Programming Devices	\$ 3.0	\$ 12.1
Electrical and Electronic Equipment	\$250.0	\$850.0

From a few percent of our sales in the mid 1960's, communications has grown to 15%, and will be even more important to us in the future. The industry's rapid transition from electro-mechanical to electronic equipment creates a need for many of the same AMP products used in computers. AMP products are used extensively by broad-based giants

The rapid transition from electro-mechanical to electronics creates a need for many additional types of AMP products.

such as AT&T, ITT, General, L. M. Erickson, Northern Telecom, Siemens, and United—and by the rapidly growing specialty electronic communications equipment firms.

The product assortment at far right shows some of many AMP products used in TeleSciences, Inc. PABX and central office equipment.

The connectors at the left of the assortment are a new type of high density backplane connector developed for next-generation Bell System equipment—typifying our close liaison with the leaders in this industry.

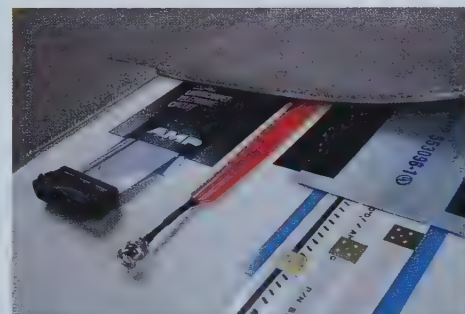
Undercarpet wiring is a relatively new building wiring system of cables, connectors, outlets, and application tooling that offers great labor and materials savings. It is part of a broad array of AMP products provided to telephone operating companies and contractors for the installation and modernization of central office equipment, transmission and distribution lines, and customer premise equipment.

AMP machine at TeleSciences applying AMP-LATCH connectors to ribbon cable.

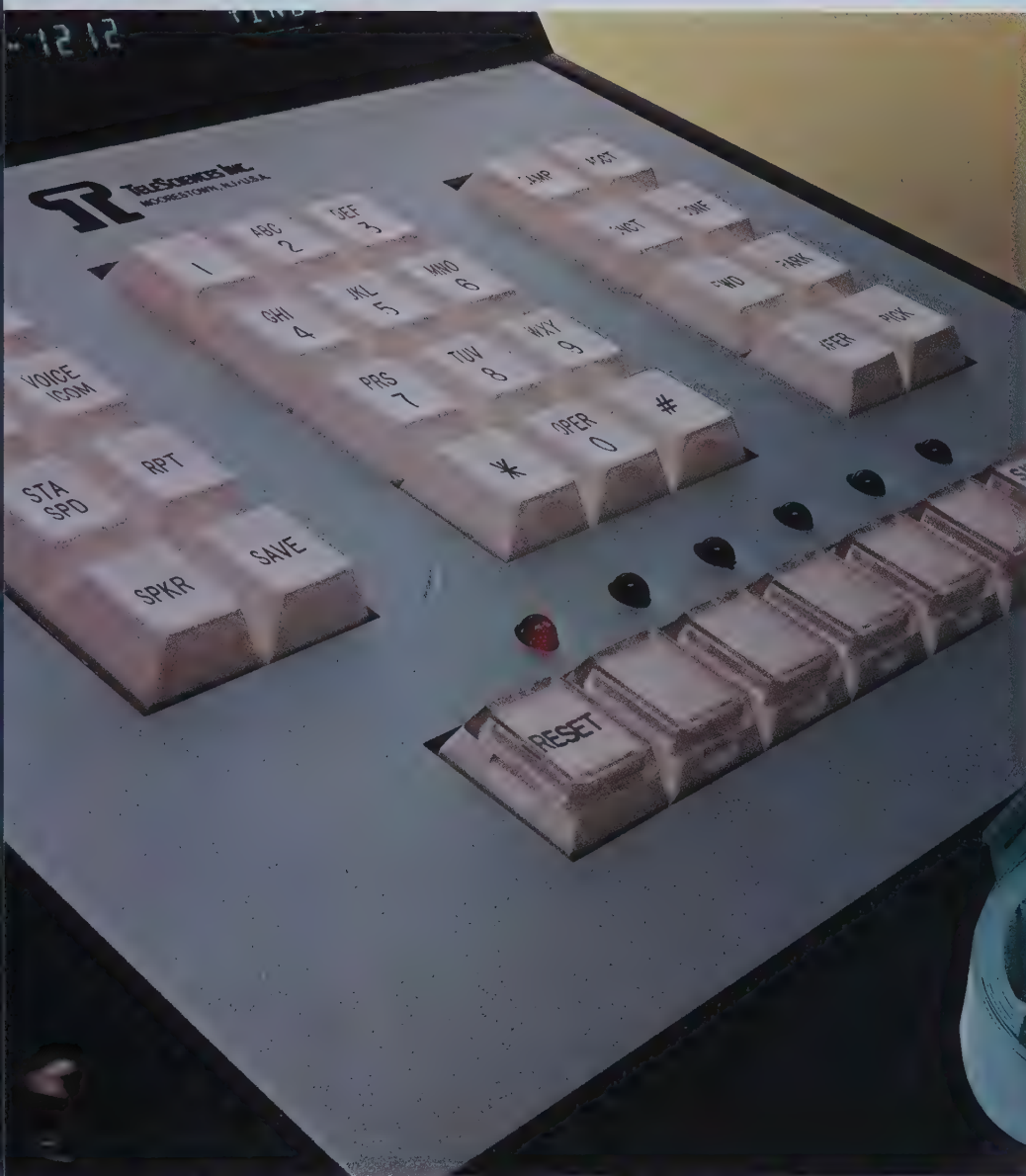


AMP sales engineer consulting with a TeleSciences engineer on connectors for communication equipment.

AMP membrane switches and keyboards are used in the new General Telephone "Flip Phone" and the ITT Terryphone SK-S2 key telephone units.



AMP labor-saving undercarpet cable system for commercial building wiring now includes power, communications and coax data transmission cables.



AMP sales engineer conferring with the management of Convergent Technologies—a fast-growing producer of office "Integrated Workstations".

MT application machine developed by AMP Germany for terminating wires into insulation displacement type connectors.

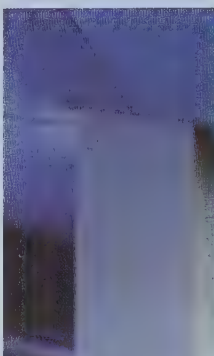
Computer industry requirements are the leading edge of electronic technology. Thus many of our products originate from our early involvement and close relationships with the leaders in this field. This creative interaction ranges from extensive development work on new products for next-generation requirements of major companies in the U.S., Europe and Japan—to the providing of existing products for virtually all of the connection needs of emerging growth companies such as Apple Computer and Convergent Technologies.

AMP fully participates in such high-growth areas as personal computers, data terminals, word processors, and CAD/CAM.

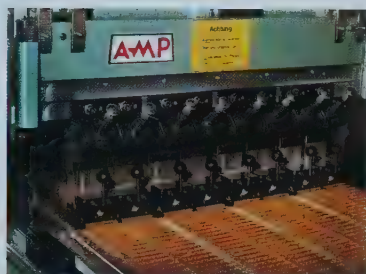
AMP has the broadest range of connection devices for electronic equipment available from a single source—from lead frames for attaching microelectronic chips to form integrated circuitry units—through packaging devices and connectors for each successive level of interconnections within the equipment—to the power or external connectors.

These strong marketing and technical capabilities enable us to participate fully in such high-growth areas as personal computers, mini-computers, data terminals, office automation equipment, and CAD/CAM systems.

The product assortment at far right shows some of the many dozens of different AMP product lines used in this field.



New IBM personal computer in use in one of our marketing divisions. AMP products are used extensively in Apple, Atari, IBM, Tandy, Texas Instruments, Xerox, and other personal computers.



Application machine developed by AMP Germany inserts over 17,000 contact posts per hour into panels at a Sperry Univac plant.



New AMP "packaging" devices for latest types of integrated circuitry units provide reliable, pluggable connections.



The revolution in home entertainment electronics presents excellent growth opportunities for both existing and new AMP products. AMP products appear in the older growth areas of TV, radio, stereo, tape recorders, and electronic organs; and also in the rapidly growing areas of video games, electronic toys and games, cable and satellite TV, videocassette recorders, and videodisc players.

The revolution in home entertainment electronics presents excellent opportunities for both existing and new AMP products.

Most AMP products for this field are machine-applied because of the particularly strong emphasis of these customers on lower installed costs. Many application machines were first developed primarily for high-volume production requirements of this and other consumer-oriented markets such as the appliance and automotive industries—and then extended to other markets.

The home entertainment, communications, and personal computer equipment of today—when linked to the world by cable or satellite TV—are expected to progress into far more complex and versatile home electronic systems that will provide a wide range of services not now available. This should offer excellent growth opportunities for AMP.

The product assortment at far right shows some of the AMP connection products used in video games and Scientific-Atlanta TV converters.

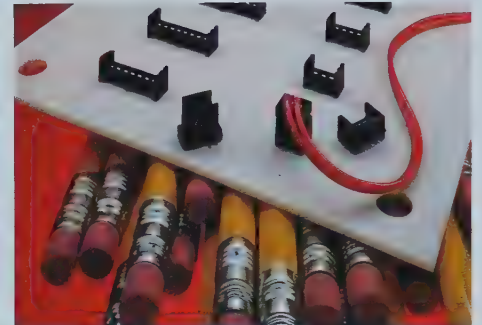
New cable assembly machine terminates up to 12 wires simultaneously into connectors to produce a variety of simple wiring harnesses.



AMP provides most of the connection devices used in Scientific-Atlanta TV set-top terminal units for cable television systems.

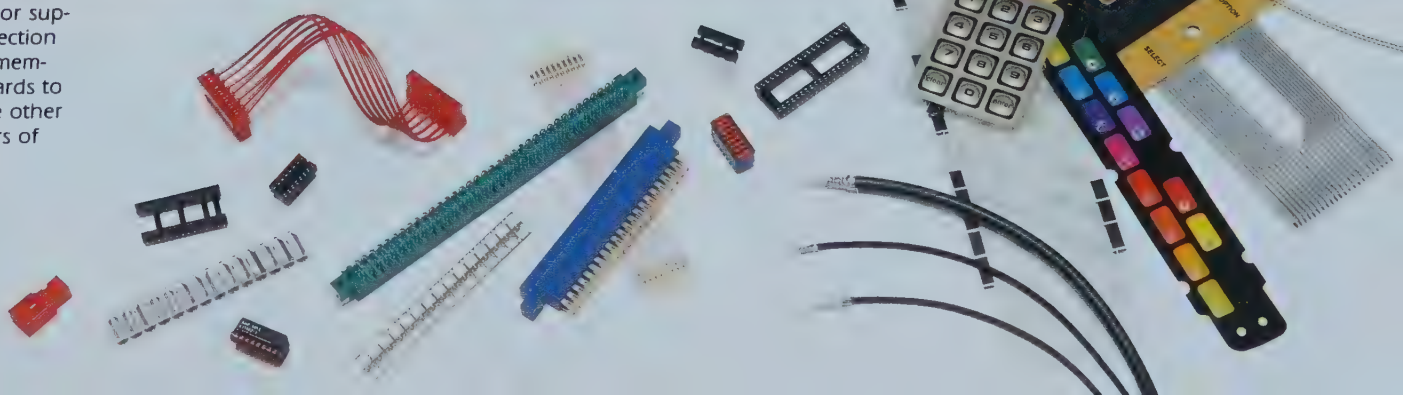


Developed by AMP Germany, new machine at a Philips plant in Austria terminates contacts on wires and applies an insulation pod.



AMP ULTREX connector developed by AMP Japan is considered the world's smallest crimp-type, wire-to-board connector.

AMP is a major supplier of connection devices and membrane keyboards to Atari and the other manufacturers of video games.



Growing use of electronics in transportation equipment provides opportunities for a far broader range of AMP products in cars, trucks, buses, off-highway equipment, trains, ships, and aircraft. Complex electronic systems for engine and pollution control, monitoring, safety, entertainment, communications, and comfort require new types of connection and switching devices—some developed for this field—others adapted from product lines used in other markets. As a result, the content of these devices per vehicle is rising steadily.

Automotive manufacturers are especially interested in automated application methods. Using our new mass termination connectors and application machines, customers such as Citroën automatically produce simple wiring harnesses.

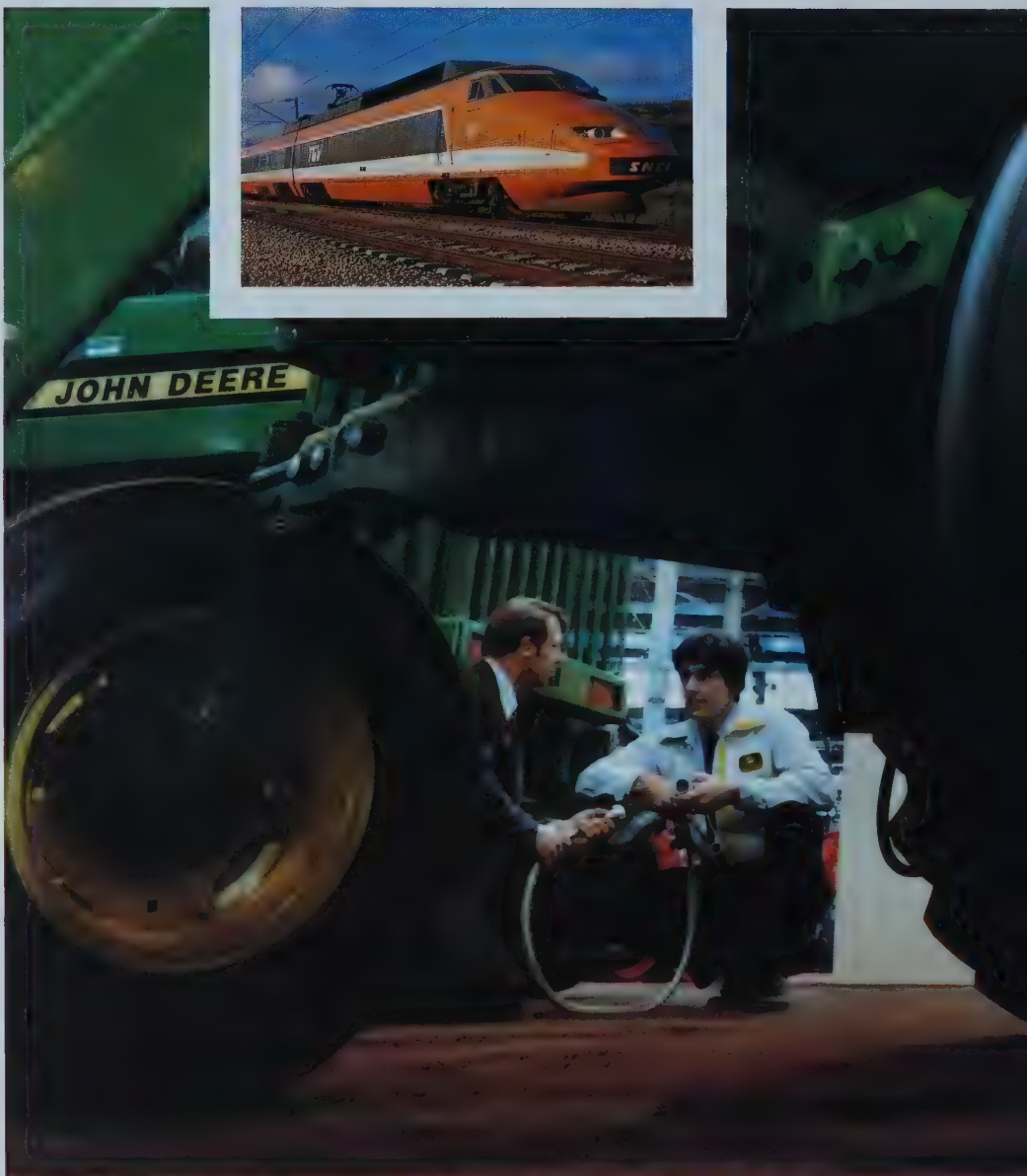
Growing use of electronics in transportation equipment provides opportunities for a far broader range of AMP products.

Our AMP Special Industries division in the U.S., and our AMPLIVERSAL marketing organizations overseas, bring AMP products to customers involved in maintenance such as garages, heavy equipment dealers, truckers, buslines, railroads, shipyards, and airlines.

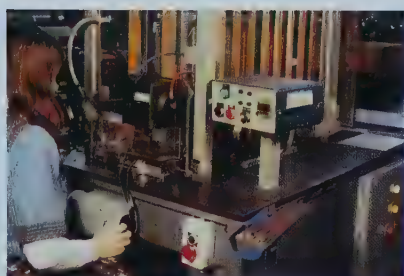
The product assortment at far right shows new connectors for automotive and off-highway equipment; and, at upper right, new connectors (NIC-600 and CR 1040) for the aerospace industry.

The new 200-MPH French railway system uses a number of AMP product families.

AMP connectors link the control console in the rear seat of a Datsun Cedric in the first known use of fiber optics for automotive controls.



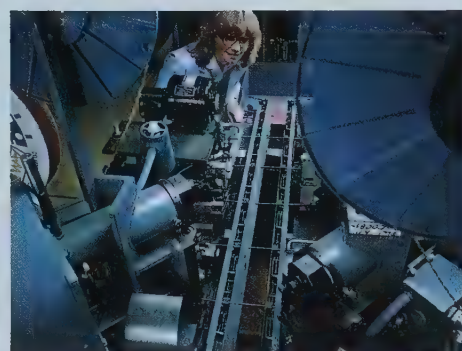
An AMP engineer demonstrating a new shielded, sealed, heavy-duty cable connector developed for John Deere and other off-highway equipment and truck manufacturers.



Cable assembly machine developed by AMP France automatically terminates wires into connectors at a Citroën automotive plant.



New fully automatic machine terminates wires and applies heat shrinkable insulation sleeves.



In 1981, we spent \$111,000,000 (9% of the sales dollar) on research, development and engineering for the creation and application of new and improved products and processes. In the past three years, our total technical spending exceeded \$300 million.

During 1980 and 1981, we re-aligned our corporate technology support organization to make it more visible and as results-oriented as possible; and to focus its efforts on the most pressing requirements and greatest opportunities facing us in the decade ahead. Some of the areas of concentration are electrical contact theory and practice, advanced electronic "packaging" or interconnection techniques, metallurgy, polymer chemistry, plating research, materials

One of the major broad areas of emphasis in our technical efforts is the packaging devices and interconnection systems needed for the latest electronic systems. This includes development of premolded leadless chip carriers for fabrication of integrated circuitry devices; sockets and receptacles that provide pluggability to printed circuit boards for new types of integrated circuitry units; and Zero Insertion Force (ZIF), Low Insertion Force (LIF), and high density connectors for printed circuit boards and panels.

Another area is the preservation of electronic signal integrity and protection from electromagnetic interference. This includes programs for adding shielding and filtering to connectors; and development of new fiber optic and coaxial connectors.

A third area is new types of flat flexible cables and circuitry. This involves providing cables or circuitry, the accompanying connectors, and complete assemblies. It includes programs in ribbon cable, transmission cable, flat conductor cable and circuitry, undercarpet cables (power, communications and data), and membrane switches and keyboards.

Finally, we are placing renewed emphasis on application tooling. A number of new application machines are shown in this report, and the next few years will bring significant new introductions as we improve our industry leadership position in this increasingly important area.

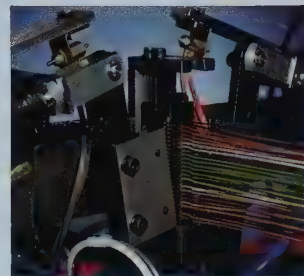
In 1981, we filed over 170 patent applications—a record number and one good indication of the current vitality of our technical efforts. We now have over 2,450 patents issued or pending in the U.S. and over 6,650 corresponding patents in 42 other countries.

In the past decade our spending on technology has totaled over \$640,000,000 and our technical force has grown from 1,200 to over 3,200 scientists, engineers, technicians and other support personnel. We continue to concentrate primarily on connection devices. The requirements are more demanding—the opportunities for growth are better than ever.

The AMP product development opportunities presented by emerging customer requirements are better than ever before.

engineering, photonics, automation research, and application of computer systems to our technical and manufacturing areas.

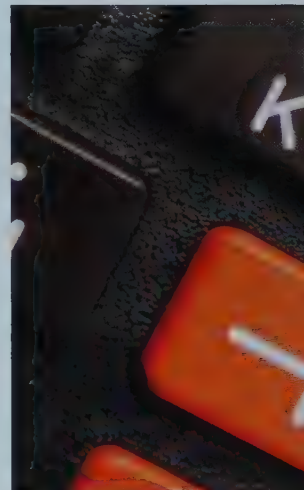
These very specialized, high-technology activities provide valuable support to nearly 100 AMP engineering departments and marketing divisions and to many customers. The disciplines encompassed provide the foundation not only for maintaining our leadership in connection devices, but also for our continued diversification into related product areas such as switches, filters, cables, flexible circuitry, membrane keyboards, and heat shrink materials.

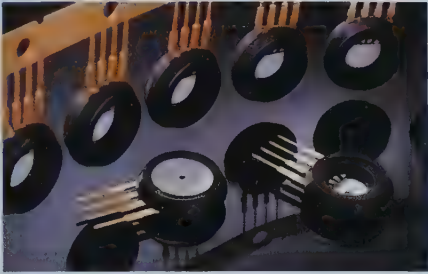


New cable assembly machine developed by AMP Great Britain terminates up to 26 wires simultaneously into connectors to form simple wiring harnesses.

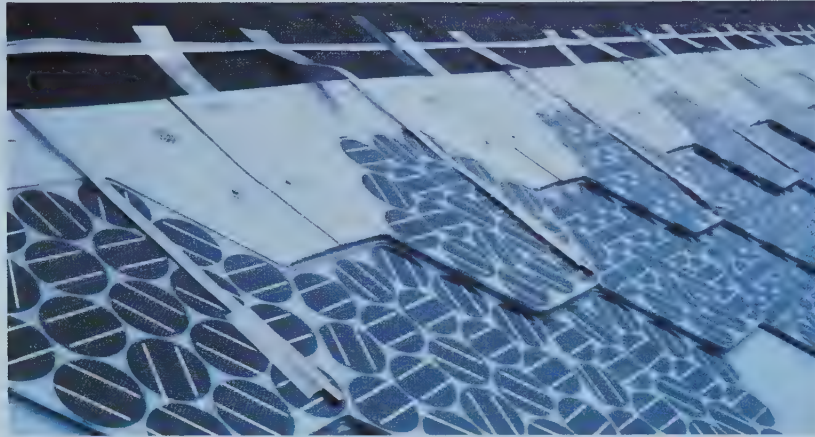


New application machine simultaneously crimps up to 35 contacts onto flexible flat conductor cable or circuitry.





AMP strip-form, premolded lead frames provide reliability and production economies in the fabrication of Motorola electronic pressure sensors.



AMP flexible flat cable and TERMI-FOIL splices interconnect photovoltaic cell shingles in this solar energy installation at M.I.T.



Membrane switches and keyboards produced by AMP Keyboard Technologies are used in nearly every market we serve.

A new product area for AMP—left, a premolded protective cap for a cathodic anode for electrical grounding of pipelines; right, acrylic-injected collar for on-site repair of gas and water pipe connections.



Operator Assist Mechanism incorporated into our basic AMP-O-LECTRIC machine can double customer productivity to rates of up to 4,000 terminated leads per hour. It can easily be field retrofitted into the thousands of machines now with customers.

Combined Statements of Income

AMP Incorporated and Pamcor, Inc.
& their subsidiaries

(dollars in thousands
except per share data)

Year Ended December 31,	1981	1980	1979
Net Sales	\$1,234,295	\$1,155,382	\$1,013,241
Cost of Sales	757,763	700,910	583,955
Gross income	476,532	454,472	429,286
Selling, General and Administrative Expenses	236,689	223,934	197,459
Income from operations (after deducting depreciation of \$50,452, \$43,667 and \$35,762)	239,843	230,538	231,827
Interest Expense	(13,101)	(14,237)	(10,011)
Other Income, net	14,218	6,812	5,796
Income before income taxes	240,960	223,113	227,612
Income Taxes	106,190	99,450	106,670
Net Income	\$ 134,770	\$ 123,663	\$ 120,942
Net Income Per Share	\$3.75	\$3.44	\$3.35

Auditors' Report

To the Shareholders and Boards of Directors
of AMP Incorporated and Pamcor, Inc.:

We have examined the combined balance sheets of AMP INCORPORATED (a New Jersey corporation) and PAMCOR, INC. (an affiliated Puerto Rican corporation) and their subsidiaries as of December 31, 1981, and 1980, and the related combined statements of income, shareholders' equity and changes in financial position for each of the three years ended December 31, 1981. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our opinion, the financial statements referred to above present fairly the combined financial position of AMP Incorporated and Pamcor, Inc. and their subsidiaries as of December 31, 1981, and 1980, and the results of their combined operations and their combined changes in financial position for each of the three years ended December 31, 1981, in conformity with generally accepted accounting principles applied on a consistent basis, after restatement for the change (with which we concur) in the method of accounting for foreign currency translation as explained in Note 1 to the combined financial statements.

Arthur Andersen & Co.

Combined Statements of Changes in Financial Position

AMP Incorporated and Pamcor, Inc.
& their subsidiaries

(dollars in thousands)

Year Ended December 31,	1981	1980	1979
Working Capital was provided from:			
Net income	\$134,770	\$123,663	\$120,942
Expenses not requiring current outlay of working capital —			
Depreciation	50,452	43,667	35,762
Deferred income taxes	6,042	5,539	2,789
Other	8,443	14,542	6,990
	199,707	187,411	166,483
Additions to long-term debt	12,540	5,892	15,808
Merger with Midland Investment Company	8,740	—	—
Miscellaneous sources, net	(3,700)	1,952	3,429
	217,287	195,255	185,720
Working Capital was used to:			
Increase investments and other assets	1,958	81	753
Acquire property, plant and equipment	108,938	113,259	95,951
Reduce long-term debt	3,265	3,803	11,019
Purchase treasury stock	907	1,485	8,704
Pay cash dividends	43,159	35,968	27,440
	158,227	154,596	143,867
Reduction of Working Capital resulting from exchange rate changes	(11,341)	(4,527)	(3,321)
Working Capital Increased	\$ 47,719	\$ 36,132	\$ 38,532
Working Capital Changes—Increases (Decreases):			
Cash, time deposits and marketable securities	\$ 57,576	\$ (3,137)	\$ (1,186)
Receivables	16,666	5,987	28,691
Inventories	(17,224)	33,921	66,790
Other current assets	(1,398)	(5,514)	8,388
International bank loans	16,728	(425)	(19,309)
Accounts payable and accrued expenses	(17,482)	2,056	(29,911)
Accrued taxes on income	(4,675)	1,202	(15,069)
Current portion of long-term debt	(2,472)	2,042	138
Working Capital Increased	\$ 47,719	\$ 36,132	\$ 38,532

Notes to Combined Financial Statements

1. Summary of Accounting Principles

Principles of Combination — The financial statements of AMP and Pamcor and their subsidiaries (all wholly owned) are combined, as each company is owned beneficially by identical shareholders. Intercompany and affiliated company accounts and transactions are eliminated in the combination.

Translation of International Operations — In 1981 the Company elected early adoption of Financial Accounting Standards Board Statement No. 52, "Foreign Currency Translation". The accounting change was applied retroactively

to years beginning on or after January 1, 1979, and accordingly the results of operations for 1979 and 1980 have been appropriately restated. The accounting change's principal impact upon the results of operations was to exclude from the Statements of Income those effects of foreign currency rate changes that did not affect cash flows.

For those international operations whose cash flows are primarily in their local currency, FAS No. 52 requires the translation of all assets and liabilities at each balance sheet

Combined Balance Sheets

AMP Incorporated and Pamcor, Inc.
& their subsidiaries

(dollars in thousands)

Assets	December 31,	1981	1980
Current Assets:			
Cash	\$	9,136	\$ 12,515
Time deposits		36,790	16,771
Marketable securities, at cost, which approximates market		103,678	62,742
Receivables, less reserves of \$8,627 and \$6,427		225,141	208,475
Inventories —			
Finished goods and work in process		116,284	125,514
Purchased and manufactured parts		94,251	96,983
Raw materials		57,075	62,337
Total inventories		267,610	284,834
Other current assets		17,742	19,140
Total current assets		660,097	604,477
Investments and Other Assets		2,430	764
Property, Plant and Equipment:			
Land		15,062	14,002
Buildings and leasehold improvements		176,750	157,267
Machinery and equipment		323,864	286,556
Machines and tools with customers		111,810	107,197
		627,486	565,022
Less — Accumulated depreciation		264,602	241,599
Property, plant and equipment, net		362,884	323,423
Total Assets		\$1,025,411	\$928,664

Notes (continued)

date into U.S. dollars using current rates of exchange. The resulting translation adjustments are accumulated in a special component of Shareholders' Equity. The results of operations are translated at average exchange rates for the period. Most of the Company's international operations are accounted for in this mode.

Certain international operations in hyperinflationary economies, whose operating results and financial position are distorted when translated into U.S. dollars using current rates of exchange exclusively, and others whose cash flows are primarily in U.S. dollars, were only slightly impacted by the accounting change. For these operations FAS No. 52 essentially continues the previous historical U.S. dollar-oriented translation

method and continues to include translation adjustments in the results of operations.

The accounting change increased net income approximately \$14,372,000 (40¢ per share) in 1981. It decreased previously reported net income approximately \$7,611,000 (21¢ per share) in 1980 and \$344,000 (1¢ per share) in 1979. The effect of the change in method is approximately the same before and after income taxes because income taxes related to the adjustments were not significant.

Inventories — Inventories, which consist of material, labor and overhead, are stated at the lower of cost, principally average, or market.

Liabilities and Shareholders' Equity	December 31,	1981	1980
Current Liabilities:			
International bank loans	\$	33,406	\$ 50,134
Accounts payable		69,829	60,305
Accrued payrolls and employee benefits		41,344	35,386
Accrued taxes on income		81,080	76,405
Accrued expenses — other		19,127	17,127
Current portion of long-term debt		4,606	2,134
Total current liabilities		249,392	241,491
Long-term debt		56,070	50,053
Deferred income taxes		30,320	25,929
Investment tax credit		12,655	10,696
Other liabilities and deferred credits		16,464	22,845
Total Liabilities		364,901	351,014
Shareholders' Equity:			
AMP Incorporated —			
Common stock, without par value —			
Authorized 50,000,000 shares, issued 37,440,000 shares		12,480	12,480
Pamcor, Inc. —			
Common stock, par value \$1.00 per share —			
Authorized and issued 20,000 shares		20	20
Other capital		25,755	3,729
Cumulative translation adjustments		(11,633)	7,876
Retained earnings		679,426	587,815
		706,048	611,920
Less — Treasury stock, at cost		45,538	34,270
Total Shareholders' Equity		660,510	577,650
Total Liabilities and Shareholders' Equity		\$1,025,411	\$928,664

Property, Plant and Equipment and Depreciation — Property, plant and equipment is stated at cost. Depreciation is computed by applying principally the straight-line method to individual items. Where accelerated depreciation methods are used for tax purposes, deferred income taxes are recorded. Investment tax credits are apportioned over the productive lives of the equipment for which they were granted.

Maintenance and repairs are charged to expense as incurred. Major repairs and improvements are capitalized and depreciated at applicable straight-line rates. Dies, small tools and accessories are charged to expense.

The cost and accumulated depreciation of items of plant and equipment retired or otherwise disposed of are removed from

the related accounts, and any residual values are charged or credited to income.

Per Share Data — Net income and cash dividends per share are based on a unit of common stock consisting of one share of the outstanding common stock of AMP and a proportionate beneficial interest in the common stock of Pamcor. The weighted average number of shares outstanding used to compute net income per share was 35,967,178 in 1981, 35,965,758 in 1980 and 36,089,899 in 1979.

Combined Statements of Shareholders' Equity

AMP Incorporated and Pamcor, Inc.
& their subsidiaries

(in thousands)

	AMP Incorporated Common Stock		Pamcor, Inc. Common Stock		Other Capital	Cumulative Translation Adjustments	Retained Earnings	Treasury Stock (Endorsed Shares)	
	Shares	Amount	Shares	Amount				Shares	Amount
Balance at December 31, 1978	37,440	\$12,480	20	\$20	\$ 2,937	\$ —	\$406,633	1,271	\$27,863
Change in accounting method for translation of net assets of international subsidiaries						16,326	(15)		
Balance at December 31, 1978 (restated)	37,440	12,480	20	20	2,937	16,326	406,618	1,271	27,863
Net income							120,942		
Cash dividends — 76¢ per share							(27,440)		
Purchase of treasury stock								250	8,704
Distributions of treasury stock under Bonus Plan					246			(55)	(1,694)
Translation adjustments						(2,831)			
Balance at December 31, 1979	37,440	12,480	20	20	3,183	13,495	500,120	1,466	34,873
Net income							123,663		
Cash dividends — \$1.00 per share							(35,968)		
Purchase of treasury stock								40	1,485
Distributions of treasury stock under Bonus Plan					546			(62)	(2,088)
Translation adjustments						(5,619)			
Balance at December 31, 1980	37,440	12,480	20	20	3,729	7,876	587,815	1,444	34,270
Net income							134,770		
Cash dividends — \$1.20 per share							(43,159)		
Purchase of treasury stock								20	907
Distributions of treasury stock under Bonus Plan					232			(60)	(2,693)
Proceeds from merger with Midland Investment Company					21,794			106	13,054
Translation adjustments						(19,509)			
Balance at December 31, 1981	37,440	\$12,480	20	\$20	\$25,755	\$(11,633)	\$679,426	1,510	\$45,538

Notes (continued)

2. Pamcor

Pamcor and its subsidiaries have no affiliates other than AMP and its subsidiaries. By trust agreement, Bankers Trust Company holds all of the Pamcor common stock for the benefit of AMP common shareholders whose certificates are endorsed to show they are entitled to a proportionate interest in the Pamcor common stock held in the Trust. This interest is not transferable separately.

The inclusion of Pamcor resulted in an increase in net income of \$13,023,000 in 1981, \$11,109,000 in 1980 and \$9,480,000 in 1979 after the elimination of unrealized profit in affiliated company inventory.

3. Midland Investment Company

On July 29, 1981 Midland Investment Company was merged into AMP Incorporated. Immediately prior to the merger, Midland assets consisted of 5,230,000 shares of AMP common stock, \$8,740,000 in cash and a cash reserve fund equal to its outstanding liabilities. Midland stockholders received common stock of AMP equivalent to 95% of Midland's holdings of AMP

stock and additional AMP treasury shares equal to 90% of Midland's cash based on a market value of \$50.75 for each AMP treasury share. The residual AMP shares were added to AMP's treasury stock. Midland shares acquired by AMP were cancelled.

4. International Operations

Net income from international operations was \$43,080,000 in 1981, \$56,407,000 in 1980 and \$50,201,000 in 1979.

Availability of remittances to the parent company is subject to exchange controls and other restrictions of the various countries.

As defined by Financial Accounting Standards Board Statement No. 52, foreign currency transaction losses after adjustment for income taxes to the extent appropriate,

decreased net income by \$4,818,000 (13¢ per share) in 1981, \$389,000 (1¢ per share) in 1980 and \$849,000 (2¢ per share) in 1979. Also affecting results for these years is the difference between results translated at historical exchange rates and current rates in hyperinflationary economies and translation adjustments of net monetary positions in the affected companies. The effects were a reduction of net income of 6¢ per share in both 1981 and 1980 and 7¢ per share in 1979.

5. Compensating Balances

Deposits supporting short-term borrowings were maintained throughout the year. Such balances were not legally restricted as to withdrawal. Short-term borrowing arrangements, for the most part, required balances expressed as an average over a period of time at 5% of commitments and an additional 5% of outstanding borrowings. At December 31, 1981 the balances required were \$6,800,000, of which approximately \$2,000,000

represented dual-purpose funds, in that those balances also constitute minimum operating balances and/or compensation for other bank services. The highest balances required during 1981 occurred at March 31, and amounted to approximately \$2,900,000 and \$4,500,000 related to commitments and outstanding borrowings, respectively.

6. Long-Term Debt

At December 31, long-term debt was comprised of the following:

(dollars in thousands)	1981	1980
8-5/8% Notes due 1985	\$ 25,000	\$ 25,000
International bank loans, 14.7% weighted interest rate (1980—13.6%), repayable in varying amounts through 1993	30,900	23,997
Mortgages, 9.7% weighted interest rate (1980—8.9%), repayable through 2004	4,776	3,190
	60,676	52,187
Less—		
Amount due within one year	4,606	2,134
	\$ 56,070	\$ 50,053

The 8-5/8% Notes are due April 1, 1985 and may not be redeemed prior to April 1, 1982. After that date the Notes will be redeemable at the option of the Company upon 30 days notice, in whole or in part, at their principal amount plus accrued interest.

The international bank loans are secured by the general credit of the borrowing companies. The mortgages are secured by property having a gross book value of \$11,814,000.

Unused commitments for long-term financing were not significant at December 31, 1981.

Principal amounts of long-term debt repayable for each of the next five years are:

1982—\$4,606,000	1984—\$ 7,044,000	1986—\$3,448,000
1983—\$5,718,000	1985—\$26,643,000	

7. Interest

In 1980 the Company first capitalized interest costs associated with the construction of certain assets, as required by Financial Accounting Standards Board Statement No. 34, "Capitalization of Interest Cost". Interest costs for the year ended December 31 were:

(dollars in thousands)	1981	1980
Interest Costs Incurred	\$ 15,017	\$ 16,040
Less—		
Interest Costs Capitalized	1,916	1,803
Interest Expensed—		
Per Statements of Income	\$ 13,101	\$ 14,237

Interest income for the year ended December 31 was: \$19,594,000 in 1981, \$9,240,000 in 1980 and \$10,149,000 in 1979.

8. Leases

The Company leases certain buildings and transportation and other equipment. Capital leases are not significant.

Total rental expense under operating leases was \$17,407,000 in 1981, \$17,158,000 in 1980 and \$13,570,000 in 1979. Minimum rental commitments at December 31, 1981 under all leases with initial terms in excess of one year were:

(dollars in thousands)	
1982	\$11,595
1983	7,090
1984	3,724
1985	1,971
1986	923
1987 and beyond	4,390

9. Employee Retirement Plans

The Company has a pension plan covering substantially all domestic employees. Certain international subsidiaries also have pension plans. Total pension expense was \$14,399,000 in 1981, \$12,112,000 in 1980 and \$12,157,000 in 1979, which includes, as to certain defined benefit plans, amortization of past service cost over 10 years. The Company's policy is to fund pension costs currently.

Comparative accumulated plan benefits and plan net assets for the United States defined benefit plan were:

(dollars in thousands)	January 1,	
	1981	1980
Actuarial present value of accumulated plan benefits:		
Vested	\$ 81,326	\$ 69,108
Nonvested	9,269	7,766
	\$ 90,595	\$ 76,874
Net assets available for plan benefits	\$ 131,345	\$ 104,414

The assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 7½% for both years.

The Company's international pension plans are not required to report to certain governmental agencies pursuant to ERISA and do not otherwise determine the actuarial value of accumulated benefits or net assets available for benefits as calculated and disclosed above. At December 31, 1981, the plans' net assets were approximately equal to the present value of vested benefits.

10. Stock Plus Cash Bonus Plan

Under terms of the incentive Stock Plus Cash Bonus Plan, participating employees are credited with bonus units having a designated value of slightly more than 95% of the market price of the Company's stock on an award date. The stock bonus computation is based on the amount of the increase in the market price of the stock over the designated value on the award date. The Plan also provides that for awards made on or after October 28, 1972 the computation may be adjusted by discounting the market price of the stock on the computation date by a percentage (not to exceed 7.5% per year) to reflect the growth in earnings per share during the period. The cash bonus

is a predetermined percentage (not more than 50%) of the value of the stock bonus. Charges to income before income taxes for current and future distributions under the Plan totaled \$909,000 in 1981, \$8,272,000 in 1980 and \$5,490,000 in 1979.

For awards granted before and outstanding at December 31, 1981, based on the market price as of that date, approximately 189,000 shares would be distributed in the years 1982 through 1987. All the treasury shares are available for payment of stock bonuses under the Plan. Gains and tax benefits on the excess of fair market value over the cost of treasury shares distributed are recorded in Other Capital.

11. Research, Development and Engineering

Research, development and engineering expenditures for the creation and application of new and improved products and

processes were \$111,000,000 in 1981, \$104,000,000 in 1980 and \$90,000,000 in 1979.

12. Income Taxes

Components of income tax expense for the year ended December 31 were:

(dollars in thousands)	1981	1980	1979
U.S. Federal:			
Taxes currently payable	\$ 50,121	\$ 34,131	\$ 44,604
Deferred taxes	3,536	3,334	(636)
Deferred investment tax credit	1,959	2,496	1,618
Foreign:			
Taxes currently payable	42,890	50,240	53,888
Deferred taxes	(1,076)	2,596	(2,401)
Other:			
Taxes currently payable	8,317	6,077	9,724
Deferred taxes	443	576	(127)
	\$106,190	\$ 99,450	\$106,670

Deferred income tax expense results from timing differences between tax and financial recognition of income and expense.

The most significant timing difference results from the use of accelerated depreciation for taxes.

13. Business Segments

The Company's business is concentrated almost entirely in one product area — electrical and electronic connection, switching and programming devices — which are sold throughout many diverse markets. It is not possible, therefore, to divide AMP's business into meaningful industry segments.

However, the Company's operations are worldwide and can be grouped into several geographic segments. Operations outside the United States are conducted through wholly owned subsidiary companies that function within assigned, principally national, markets. The subsidiaries manufacture locally where

required by market conditions and/or customer demands, and where permitted by economies of scale. Most are also self-financed. However, while they operate fairly autonomously, there is a substantial amount of parent-to-subsidary as well as

inter-subsidiary sales, particularly among the European subsidiaries.

Pertinent financial data by major geographic segments for 1981, 1980 (restated) and 1979 (restated) is:

(dollars in thousands)	Sales to Unaffiliated Customers	Intersegment Sales	Total Sales	Pretax Income	Net Income	Total Assets
United States:						
1981	\$ 696,855	\$82,038	\$778,893	\$156,066	\$ 91,690	\$ 706,390
1980	578,682	72,687	651,369	113,870	67,256	586,841
1979	522,386	65,510	587,896	125,924	70,741	516,912
Europe:						
1981	\$ 316,185	\$ 3,054	\$319,239	\$ 46,540	\$ 24,656	\$ 214,531
1980	390,115	4,182	394,297	77,502	40,031	249,982
1979	326,030	3,957	329,987	70,999	34,628	246,516
Far East:						
1981	\$ 140,285	\$ 505	\$140,790	\$ 25,388	\$ 12,011	\$ 95,076
1980	112,541	658	113,199	17,122	8,444	82,549
1979	101,897	260	102,157	17,618	8,639	70,019
Other:						
1981	\$ 80,970	\$ 942	\$ 81,912	\$ 12,966	\$ 6,413	\$ 50,186
1980	74,044	510	74,554	14,619	7,932	46,388
1979	62,928	62	62,990	13,071	6,934	34,594
Total:						
1981	\$1,234,295			\$240,960	\$134,770	\$1,025,411
1980	1,155,382			223,113	123,663	928,664
1979	1,013,241			227,612	120,942	837,509

Transfers between geographic segments are generally priced uniformly at "large quantity customer prices less a fixed discount" for items not requiring further manufacture and at "cost plus a fixed percentage" for items subject to further processing. These transfers resulted in intersegment receivables at December 31: 1981 — \$29,282,000; 1980 — \$28,268,000 and 1979 — \$24,392,000.

Included in the assets of the United States segment are short-term investments at December 31: 1981 — \$133,000,000; 1980 — \$77,000,000 and 1979 — \$80,000,000; which generated interest income of approximately \$17,004,000, \$7,781,000 and \$9,169,000, respectively.

14. Summarized Quarterly Financial Data (Unaudited)

(dollars in thousands)	March 31	For the 3 Months Ended		December 31
		June 30	September 30	
1981				
Net sales	\$304,816	\$314,016	\$308,244	\$307,219
Gross income	120,539	122,927	118,474	114,592
Net income	33,103	34,072	34,135	33,460
Net income per share	92¢	95¢	95¢	93¢
1980				
Net sales	\$284,186	\$296,078	\$284,634	\$290,484
Gross income	114,658	118,115	110,992	110,707
Net income	30,948	34,312	29,113	29,290
Net income per share	86¢	96¢	81¢	81¢

Quarterly information for the first three quarters of 1981 and for each quarter of 1980 has been restated in accordance with the accounting change described in Note 1.

15. Information on Effects of Changing Prices (Unaudited)

The following information is presented in conformance with Financial Accounting Standards Board Statement No. 33. That standard requires the Company to use two methods for estimating the effects of inflation on operations: "constant dollar" and "current cost". The constant dollar method measures certain financial statement items in dollars having the same purchasing power, through use of the U.S. Consumer Price Index for all Urban Consumers (CPI-U), and is intended to show how general inflation has affected a company. The current cost method measures these same financial statement items in terms of specific prices which would have been encountered if the prescribed assets consumed or in place

during the year had been replaced currently by identical assets.

Financial data adjusted for the effects of inflation serves only as a supplement to the primary financial statements which, admittedly, do not reflect adequately the impact of inflation. The reader is cautioned not to place undue reliance upon either price-adjusted result, as the means used to compile such data lack the precision inherent in assembling and quantifying primary statement data. Neither price-adjusted result evaluates the Company's ability to increase selling prices, achieve productivity gains or otherwise employ its technological resources in maintaining its profitability. Further, the CPI-U is a less than appropriate index of inflation for a

manufacturing company operating in a multinational environment. Nor does a concept of immediate replacement by identical assets reflect reality.

Primary statements compiled in conformance with Financial Accounting Standards Board Statement No. 52 were not compared with price-adjusted data compiled under FAS No. 33, pending formal amendment of that standard to a translation basis consistent with FAS No. 52. The Company has elected to present the primary financial statement data prepared in accordance with Financial Accounting Standards Board

Statement No. 8 to which the price-adjusted data is comparable.

The Company believes that the confusion accompanying the transition in accounting principles applicable to translation methods and changing prices tends to make the comparisons below less meaningful. It does believe, however, that its performance as measured by the FAS No. 52 accounting method is the most representative of its "real" profitability during 1981.

Statement of Income Adjusted for the Effects of Changing Prices for the Year Ended December 31, 1981

(dollars in thousands except per share data)	Primary Statements		Price-Adjusted Statements	
	FAS No. 52	FAS No. 8	General Inflation (Constant Dollar)	Specific Prices (Current Cost)
Net Sales	\$1,234,295	\$1,234,295	\$1,234,295	\$1,234,295
Cost of Sales	757,763	778,400	803,000	764,000
Expenses and Other Income, net	235,572	229,307	231,610	232,808
Income Taxes	106,190	106,190	106,190	106,190
	1,099,525	1,113,897	1,140,800	1,102,998
Net Income	\$ 134,770	\$ 120,398	\$ 93,495	\$ 131,297
Net Income Per Share	\$3.75	\$3.35	\$2.60	\$3.65
Depreciation included above	\$ 50,452	\$ 51,866	\$ 71,000	\$ 66,000
Loss from Decline in Purchasing Power of Net Monetary Assets			\$ 1,600	\$ 1,600

Note 1. Only the inventory component of cost of sales and depreciation were adjusted to arrive at net income adjusted for general inflation and changes in specific prices. Current cost depreciation is based on the average current cost of plant and equipment during the year. Other current cost of sales adjustments reflect the current cost of replacing, at the time of sale, materials, labor and various other items comprising cost of sales. Revenues and all other operating expenses are considered to reflect the average price levels for 1981 and, accordingly, have not been adjusted. As prescribed by FAS No. 33, no adjustments were made to income taxes.

Note 2. Current costs of inventories and net property, plant and equipment during the year decreased \$17,500,000. The corresponding decrease in constant dollar terms amounted to \$88,900,000. Approximately \$40,000,000 of the decrease is attributable to the significant

increase in the value of the U.S. dollar versus other currencies.

Note 3. The current cost of inventories at December 31, 1981 of \$270,000,000, determined principally by recent product costs, compares to a FAS No. 8 basis cost of \$265,875,000. The current cost of net property, plant and equipment at December 31, 1981 of \$509,000,000, determined by a combination of price quotations, engineering cost estimates, and price indexes, compares to a FAS No. 8 basis cost of \$372,228,000.

Note 4. The loss from the decline in purchasing power of net monetary assets is due to monetary assets exceeding monetary liabilities, averaged over 1981. Net monetary assets are cash and claims to cash less amounts owed, which are fixed in terms of numbers of dollars to be received or paid.

As the comparison of price-adjusted results, above, indicates, specific price changes encountered by the Company during 1981

increased less than the rate of general inflation as measured by the CPI-U.

Five-Year Comparison of Selected Supplementary Financial Data Adjusted for Effects of Changing Prices

(dollars in thousands except per share data)	Year Ended December 31,				
	1981	1980	1979	1978	1977
	(In average 1981 dollars)				
Net Sales	\$1,234,295	\$1,275,227	\$1,269,581	\$1,116,737	\$ 949,986
Constant Dollar Information:					
Net income	\$ 93,495	\$ 94,960	\$ 109,921	—	—
Net income per share	\$2.60	\$2.64	\$3.05	—	—
Net assets at year end	\$ 781,000	\$ 729,000	\$ 676,000	—	—
Current Cost Information:					
Net income	\$ 131,297	\$ 99,579	\$ 105,197	—	—
Net income per share	\$3.65	\$2.77	\$2.92	—	—
Net assets at year end	\$ 784,000	\$ 785,000	\$ 765,000	—	—
Increase (decrease) in specific prices over increase in the general price level	\$ (88,900)	\$ (39,700)	\$ 16,000	—	—
Other Information:					
Purchasing power gain (loss) on net monetary items	\$ (1,600)	\$ 440	\$ (2,650)	—	—
Cash dividends per share	\$1.20	\$1.10	\$.95	\$.84	\$.72
Average CPI-U (1967 = 100)	272.4	246.8	217.4	195.4	181.5
Stock price per share at December 31 (based on year-end CPI-U)	\$50 $\frac{1}{8}$	\$56 $\frac{1}{2}$	\$49 $\frac{1}{4}$	\$42 $\frac{1}{2}$	\$41

Officers

J. D. Brenner
Chairman of the Board
and Chief Executive Officer

Walter F. Raab
Vice Chairman of the Board
and Chief Financial Officer

Harold A. McInnes
President, and Director

W. Bennett Conner
Vice President,
Director of Marketing

John E. Eberle
Vice President, Operations

Gerald F. Englehart
Vice President, International

James E. Marley
Vice President, Manufacturing

Benjamin Savidge
Vice President and Controller

Mark L. Miller
Treasurer

Hugo A. Walfred
Secretary and
General Legal Counsel

Divisional Vice Presidents (of AMP Incorporated only):

Corporate Services:

Dan L. Eyre
Facilities and Vendor Resources

James T. Gavin
Administration and Controls

Philip G. Guarneschelli
Industrial Relations

Joseph P. Sweeney
Technology

International:

Ted L. Dalrymple
International Sales

Gerhard M. Schmidt
Northern and Central Europe

Richard D. Seall
International Finance

Marketing:

G. Russell Knerr, Jr.
Data Systems Sales

Oscar B. Rudolph
AMP Products Corporation

Robert J. Steele
Industrial Sales

Operations:

John R. Hopkins
Special Products

August P. Kastel
Packaging and Components

Harold W. Narigan
General Products

Donald W. Shoemaker
Communications and Assemblies

H. Chester Timmins
Automatic Machine

Charles T. Wyrick
AMP Keyboard Technologies, Inc.

Board of Directors

Executive Committee

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Chairman of the Board
and Chief Executive Officer

C. J. Fredricksen (2)
Chairman of the
Executive Committee

Harold A. McInnes
President

Walter F. Raab
Vice Chairman of the Board
and Chief Financial Officer

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President and Chief Executive
Officer, Harsco Corp.,
Harrisburg, PA,
Manufacturer of fabricated
metal products

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Officer, Kidder, Peabody & Co.,
Incorporated, New York, NY,
Investment bankers

Alexander P. Hixon (2)
Chairman, Hixon Properties,
Inc., San Antonio, Texas,
Investments

R. E. Jordan (1)
President, L. B. Smith, Inc.,
Harrisburg, PA,
Construction equipment sales
and rentals

William S. West (1)
Chairman and Chief Executive
Officer, The West Company,
Phoenixville, PA,
Manufacturer of packaging
components, principally for
the pharmaceutical and
hospital supply industries

Directors Emeritus:

S. S. Auchincloss
Consultant to the Corporation,
Retired President of
AMP Incorporated

R. M. Brumfield
Chairman of Hurst Mfg. Corp.,
Princeton, Indiana,
Manufacturer of
electrical motors
(Retired Chairman of Potter &
Brumfield Division, AMF Inc.)

(1) member, Audit Committee

(2) member, Compensation Committee

Subsidiaries and Branches

(all wholly owned and included in combined results)

AMP Keyboard Technologies, Inc.
Burlington, Massachusetts

AMP Products Corporation,
Valley Forge, Pennsylvania

AMP S.A. Argentina,
Buenos Aires, Argentina

AMP do Brasil Ltda.,
São Paulo, Brasil

AMP of Canada, Ltd.,
Toronto, Canada

AMP de Mexico, S.A.,
Mexico City, D.F. Mexico

AMP Osterreich Ges.m.b.H.,
Vienna, Austria

AMP Belgium,*
Brussels, Belgium

AMP Danmark,*
Viby, Denmark

AMP Finland OY,
Helsinki, Finland

AMP de France,
Paris, France

AMP of Great Britain Limited,
London, England

AMP-Holland B.V.,
's-Hertogenbosch,
The Netherlands

AMP Ireland Limited,
Dublin, Ireland

AMP Italia S.p.A.,
Turin, Italy

AMP Norge A/S,
Oslo, Norway

AMP Española, S.A.,
Barcelona, Spain

AMP Svenska A.B.,
Stockholm, Sweden

AMP A.G.,
Lucerne, Switzerland

AMP Deutschland G.m.b.H.,
Frankfurt, West Germany

*Branch of AMP-Holland B.V.

Australian AMP Pty. Limited,
Sydney, Australia

AMP Products Pacific Ltd.,
Hong Kong

AMP (Japan), Ltd.,
Tokyo, Japan

New Zealand AMP Ltd.,
Auckland, New Zealand

AMP Singapore Pte. Ltd.,
Singapore

AMP Taiwan,
Taipei, Taiwan



How we're plating connectors with gold to keep your costs down.

Getting back without copper has to pay for any copper that is lost in the process. The deposition of gold on connectors is a costly process. But why? There's nothing wrong with the gold. It's the way it's being used. Over the years, we've learned that the gold plating process is a waste of money. The reason is not a lack of technology, but a lack of understanding. And we're the only ones who know that.

At AMP, we've developed a new process for plating connectors. It's called "Gold Plating with Gold." It's a simple process that saves you money. It's a process that's been used by AMP for over 20 years. It's a process that's been used by AMP for over 20 years. It's a process that's been used by AMP for over 20 years.

AMP means productivity.



How we simplified a connector to make fiber optics worth looking into.

If you're a customer that uses fiber optics, you know that fiber optics are a great way to connect your equipment. But why? There's nothing wrong with fiber optics. It's the way it's being used. Over the years, we've learned that the fiber optic process is a waste of money. The reason is not a lack of technology, but a lack of understanding. And we're the only ones who know that.

At AMP, we've developed a new process for fiber optics. It's called "Fiber Optic Simplification." It's a simple process that saves you money. It's a process that's been used by AMP for over 20 years. It's a process that's been used by AMP for over 20 years. It's a process that's been used by AMP for over 20 years.

AMP means productivity.

Several hundred AMP advertisements in over one hundred publications were part of an extensive world wide Advertising and Sales Promotion program in 1981 that included direct mail campaigns, brochures, technical papers, movies, seminars, and trade shows.



Cover yourself with our shielded connectors.

There's the most effective way to reduce your equipment's electromagnetic emissions—and help you comply with the new FCC emissions regulations.

Choose from a wide range of interface styles as all AMP shielded connectors are designed with superior shielding.

Shielded connectors are available in a wide range of sizes and configurations. They're designed to meet the needs of your application. They're designed to meet the needs of your application. They're designed to meet the needs of your application.

AMP means productivity.

AMP Marketing Organizations

**Data Systems Sales Division,
Harrisburg, PA**
Serves U.S. computer and office equipment manufacturers.

**Industrial Sales Division,
Harrisburg, PA**
Serves most U.S. original equipment manufacturers (OEM's).

**Telecom Division,
Harrisburg, PA**
Serves U.S. telecommunication OEM's and operating telephone companies.

**AMP Keyboard Technologies, Inc.,
Burlington, MA**
Provides membrane switches and keyboards primarily through the other AMP marketing organizations.

**AMP Special Industries,
Valley Forge, PA**
Serves tens of thousands of U.S. customers such as special OEM's, industrial maintenance users, airlines, shipyards, mines, contractors, electric and gas utilities, resale organizations, distributors, and other special markets.

**AMP of Canada, Ltd.,
Toronto, Canada**
Serves all Canadian customers.

Subsidiaries in Latin America, Europe, and the Far East
These 23 subsidiaries and branches have manufacturing, engineering, and marketing capabilities using the same basic AMP approach. Each has an industrial marketing unit to serve OEM's and an AMPLIVERSAL division for the maintenance, utility, and other non-OEM markets.

AMP has over 1,000 distributors worldwide.